Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Withdrawn) Compounds of formula I:

wherein

 R^1 = H, or C_1 - C_{20} alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, =CHR³, - $C(O)OR^3$, - $C(O)OR^3$, - $CH_2C(O)OR^3$, - $CH_2C(O)NHR^3$, where R^3 is H or C_1 - C_{10} alkyl, cycloalkyl, or alkenyl;

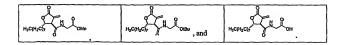
 $R^2 = C_1 - C_{20}$ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl;

 X^1 = NHR⁴, where R⁴ is H, C₁-C₂₀ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, the R⁴ group optionally containing a carbonyl group, a carboxyl group, a carboxyamide group, an alcohol group, or an ether group, the R⁴ group further optionally containing one or more halogen atoms.

2. (Withdrawn) The compounds of claim 1, wherein R^1 is H, or C_1 - C_{10} alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, or =CH₂.

- 3. (Withdrawn) The compounds of claim 2, wherein R¹ is -CH₃ or =CH₂.
- (Withdrawn) The compounds of claim 3, wherein the compound is selected from the group consisting of:

- (Withdrawn) The compounds of claim 1, wherein R⁴ is -CH₂C(O)OR⁵ or
 -CH₂C(O)NHR⁵, where R⁵ is H, C₁-C₁₀ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.
- (Withdrawn) The compounds of claim 1, wherein the compound is selected from the group consisting of:



7. (Withdrawn) Compounds of formula II:



 $R^6 = H$, or $C_1 - C_{20}$ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, $-C(O)OR^8$, C(O)R⁸, -CH₂C(O)OR⁸, -CH₂C(O)NHR⁸, where R⁸ is H or C₁-C₁₀ alkyl, cycloalkyl, or alkenyl;

 $R^7 = C_1 - C_{20}$ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl;

X² = NHR⁹, where R⁹ is H. C₁-C₂₀ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, the R9 group optionally containing a carbonyl group, a carboxyl group, a carboxyamide group, an alcohol group, or an ether group, the R⁹ group further optionally containing one or more halogen atoms:

with the proviso that when R⁶ is-CH₃, and R⁷ is n-C₁₃H₂₇, X² is not -NHC₂H₅.

- (Withdrawn) The compounds of claim 7, wherein R⁶ is C₁-C₁₀ alkyl, cycloalkyl, 8. alkenyl, aryl, arylalkyl, or alkylaryl.
- (Withdrawn) The compounds of claim 8, wherein R⁶ is -CH₃. 9.
- (Withdrawn) The compounds of claim 7, wherein R9 is-CH2C(O)OR10 or-10 CH₂C(O)NHR¹⁰, where R¹⁰ is H. C₁-C₁₀ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl,
- (Withdrawn) Compounds of formula IV: 11.

 $\label{eq:R18} R^{16} = H, \mbox{ or } C_1 - C_{20} \mbox{ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, -C(O)OR^{18}, \\ -C(O)R^{18}, -CH_2C(O)OR^{18}, -CH_2C(O)NHR^{18}, \mbox{ where } R^{18} \mbox{ is } H \mbox{ or } C_1 - C_{10} \mbox{ alkyl, cycloalkyl, or alkenyl;}$

 $R^{17} = C_1 - C_{20}$ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl;

 $X^4 = OR^{19}$, where R^{19} is C_1 - C_{20} alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, the R^{19} group optionally containing a carbonyl group, a carboxyl group, a carboxyamide group, an alcohol group, or an ether group, the R^{19} group further optionally containing one or more halogen atoms;

with the proviso that when R^{16} is -CH₃ and R^{19} is -CH₃, then R^{17} is not substituted or unsubstituted phenyl, -nC₃H₇, -nC₅H₁₁, -nC₁₃H₂₇, and with the further proviso that when R^{16} is H and R^{19} is -CH₃, then R^{17} is not substituted or unsubstituted phenyl or -CH₃, and when R^{16} is H and R^{19} is -CH₃CH₃, then R^{17} is not -iC₃H₇, or substituted or unsubstituted phenyl.

- 12. (Withdrawn) The compounds of claim 11, wherein R^{16} is C_1 - C_{10} alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.
- 13. (Withdrawn) The compounds of claim 12, wherein R¹⁶ is -CH₃.

- (Withdrawn) The compounds of claim 11, wherein R¹⁹ is -CH₂C(O)OR²⁰ or
 -CH₂C(O)NHR²⁰, where R²⁰ is C₁-C₂₀ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.
- 15. (Currently Amended) Compounds of formula V:

 $R^{21}=cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, =CHR^{23}, -C(O)OR^{23} \\ -C(O)R^{23}, -CH_2C(O)OR^{23}, -CH_2C(O)NHR^{23}, where R^{23} is H or C_I-C_{10} alkyl, cycloalkyl, or alkenyl, except when R^{21} is =CHR^{23}, R^{23} is not H;$

 $R^{22} = C_2 - C_{20} C_7 - C_{20}$ alkyl, cycloalkyl, alkenyl, ; arylalkyl, or alkylaryl;

with the proviso that when R^{21} is -COOH, then R^{22} is not -CH₃, -nC₃H₁₁, or C₁₃H₂₇ and with the further proviso that when R^{21} is -CH₂COOH, then R^{22} is not -CH₂CH₃, or - iC₃H₁₁.

- (Previously Presented) The compounds of claim 15, wherein R²¹ is cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.
- 17. (Cancelled)
- 18. (Withdrawn) Compounds of formula VI:

 $R^{24} = C_2 - C_{20}$ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, $-C(O)OR^{26}$,

-C(O)R 26 , - CH₂C(O)OR 26 , -CH₂C(O)NHR 26 , where R 26 is H or C₁-C₁₀ alkyl, cycloalkyl, or alkenyl;

 $R^{25} = C_1 - C_{20}$ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl;

with the proviso that when R^{24} is -COOH, then R^{25} is not -CH₃, -nC₅H₁₁, or C₁₃H₂₇, and with the further proviso that when R^{24} is -CH₂COOH, then R^{25} is not-CH₃-CH₂CH₃, or - iC₅H₁₁.

- 19. (Withdrawn) The compounds of claim 18, wherein R^{21} is C_2 - C_{10} alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.
- 20. (Previously Presented) Compounds of formula VII:

$$R^{27} = C_{16} - C_{20}$$
 alkyl.

- 21 22. (Cancelled)
- (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound of formula IX:

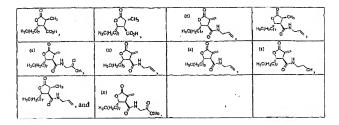
$$\begin{split} R^{29} = H, \text{ or } C_{l}\text{-}C_{20} \text{ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, =CHR^{31}, \\ -C(O)OR^{31}, -C(O)OR^{31}, -CH_{2}C(O)OR^{31}, -CH_{2}C(O)NHR^{31}, \text{ where } R^{31} \text{ is } H \text{ or } C_{l}\text{-}C_{l0} \text{ alkyl, } \\ \text{cycloalkyl, or alkenyl;} \end{split}$$

 $R^{30} = C_1 - C_{20} \ alkyl, \ cycloalkyl, \ alkenyl, \ aryl, \ arylalkyl, \ or \ alkylaryl;$

 $X^5 = -OR^{32}$, or $-NHR^{32}$, where R^{32} is H, C_1 - C_{20} alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, the R^{32} group optionally containing a carbonyl group, a carboxyl group, a carboxyamide group, an alcohol group, or an ether group, the R^{32} group further optionally containing one or more halogen atoms:

with the proviso that when R^{29} is =CH₂, then X^5 is not OH.

- 24. (Withdrawn) The pharmaceutical compositions of claim 23, wherein R^{29} is $C_1 \cdot C_{10}$ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, or $=CH_2$.
- (Withdrawn) The pharmaceutical compositions of claim 24, wherein R²⁹ is -CH₃ or
 =CH₂.
- 26. (Withdrawn) The pharmaceutical compositions of claim 23, wherein R^{32} is $-CH_2C(O)OR^{33} \text{ or-} CH_2C(O)NHR^{33}, \text{ where } R^{33} \text{ is } C_I\text{-}C_{10} \text{ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.}$
- 27. (Withdrawn) The pharmaceutical compositions of claim 23, where R^{29} is ${}^{-}C_6H_{13}$ or ${}^{-}C_8H_{17}$.
- 28. (Withdrawn) The pharmaceutical compositions of claim 23, wherein the compound is selected from the group consisting of:



 (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 1.

- (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 7.
- (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 11.
- (Original) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 15.
- (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 18.
- (Original) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 20.
- (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 22.
- (Withdrawn) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to Formula III:

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wherein

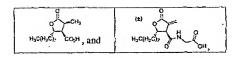
R11 = H, or C1-C20 alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, =CHR13,

-C(O)OR¹³, -C(O)R¹³, -CH₂C(O)OR¹³, -CH₂C(O)NHR¹³, where R^{13} is H or C_1 - C_{10} alkyl, cycloalkyl, or alkenyl;

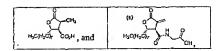
 $R^{12} = C_1 - C_{20}$ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl;

 $X^3 = OR^{14}$, where R^{14} is C_1 - C_{20} alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, the R^{14} group optionally containing a carbonyl group, a carboxyl group, a carboxyamide group, an alcohol group, or an ether group, the R^{14} group further optionally containing one or more halogen atoms.

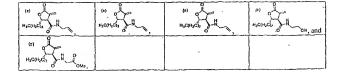
- 37. (Withdrawn) The pharmaceutical formulation of claim 36, wherein R^{11} is C_1 - C_{10} alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, or = CH_2 .
- 38. (Withdrawn) The pharmaceutical formulation of claim 37, wherein R¹¹ is -CH₃ or =CH₂.
- 39. (Withdrawn) The pharmaceutical formulation of claim 36, wherein R¹⁴ is -CH₂C(O)OR¹⁵ or CH₂C(O)NHR¹⁵, where R¹⁵ is C₁-C₁₀ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.
- 40. (Withdrawn) A method of inducing weight loss in an animal or human subject comprising administering an effective amount of a pharmaceutical composition according to claim 23 to said subject.
- 41. (Withdrawn) The method of claim 40, wherein the subject is a human.
- 42. (Withdrawn) The method of claim 40, wherein the subject is an animal.
- (Withdrawn) The method of claim 41, wherein the pharmaceutical composition comprises a compound selected from the group consisting of



44. (Withdrawn) The method of claim 42, wherein the pharmaceutical composition comprises a compound selected from the group consisting of:



- 45. (Withdrawn) A method of inhibiting growth of cancer cells in an animal or human subject, comprising administering an effective amount of a pharmaceutical composition according to claim 23 to said subject.
- 46. (Withdrawn) The method of claim 45, wherein the subject is a human.
- 47. (Withdrawn) The method of claim 45, wherein the subject is an animal.
- 48. (Withdrawn) The method of claim 46, wherein the pharmaceutical composition comprises a compound selected from the group consisting of



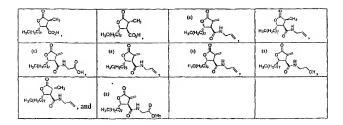
49. (Withdrawn) The method of claim 47, wherein the pharmaceutical composition comprises a compound selected from the group consisting of:

(a) 0 H	Hackhacha J.	Haconzon J. H.	H ₃ C(H ₂ C) ₁ H ₃ OH, and
(e) 01 H ₃ C(H ₂ C), N 0 OMo.			

- 50. (Withdrawn) A method of stimulating the activity of CPT-1 in an animal or human subject comprising administering an effective amount of a pharmaceutical composition according to claim 23 to said subject.
- 51. (Withdrawn) The method of claim 50, wherein the subject is a human.
- 52. (Withdrawn) The method of claim 50, wherein the subject is an animal.
- 53. (Withdrawn) The method of claim 51, wherein the compound is:

54. (Withdrawn) The method of claim 52, wherein the compound is:

- 55. (Withdrawn) A method of inhibiting the activity of neuropeptide-Y in an animal or human subject comprising administering an effective amount of a pharmaceutical composition according to claim 23 to said subject.
- 56. (Withdrawn) The method of claim 55, wherein the subject is a human.
- 57. (Withdrawn) The method of claim 55, wherein the subject is an animal.
- 58. (Withdrawn) A method of inhibiting fatty acid synthase activity in an animal or human subject comprising administering an effective amount of a pharmaceutical composition according to claim 23 to said subject.
- 59. (Withdrawn) The method of claim 58, wherein the subject is a human.
- 60. (Withdrawn) The method of claim 58, wherein the subject is an animal.
- 61. (Withdrawn) The method of claim 59, wherein the compound is selected from the group consisting of:



 (Withdrawn) The method of claim 60, wherein the compound is selected from the group consisting of:

Historicia coun ,	Hacetach coate,	HsQHzO),	H ₃ O(H ₃ O) ₂
(t) 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	HACHHACAS HA	H3CH3cla h	H ₃ C(H ₂ C), H CH,
H ₃ C(H ₃ C), and	(±) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		

63. (Withdrawn) A method of inhibiting growth of invasive microbial cells in an animal or human subject comprising the administration of an effective amount of a pharmaceutical composition according to claim 23 to said subject.

64 - 65. (Cancelled)

66. (Withdrawn) The method of claim 64, wherein the compound is selected from the group consisting of:

$$H_3C(H_2C)_7$$
 $H_3C(H_2C)_7$ H_3C

67. (Withdrawn) The method of claim 65, wherein the compound is selected from the group consisting of:

- 68. (Not Entered)
- 69. (Currently Amended) Compounds according to claim 15, wherein

R²¹ = cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, =CHR²³, -C(O)OR²³ -C(O)R²³,

-CH₂C(O)OR²³, -CH₂C(O)NHR²³, where R^{23} is H or $C_{\Gamma}C_{ID}$ alkyl, cycloalkyl, or alkenyl, except when R^{21} is =CHR²³, R^{23} is not H:

 $R^{22} = C_i \!\!-\!\! C_{20} \, \underline{C_{7} \!\!-\!\! C_{20}} \text{ alkyl, cycloalkyl, alkenyl, arylalkyl, or alkylaryl;}$

with the proviso that when R^{21} is -COOH, then R^{22} is not -CH₃, -C₁₃H₂₇ or C₁₃H₂₇ and with the further proviso that when R^{21} is -CH₂COOH, then R^{22} is not -CH₂CH₃, or - iC₃H₁₁.

- (Previously Presented) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 69.
- 71. (Previously Presented) Compounds of formula X:

 $R^{42} = C_2 - C_{20}$ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.

- (Previously Presented) A pharmaceutical composition comprising a pharmaceutical diluent and a compound according to claim 71.
- 73. (Withdrawn) A method of inhibiting the activity of fatty acid synthase in a cell comprising administering to the cell an effective amount of a pharmaceutical composition comprising a pharmaceutical diluent and one or more compounds of formula V:

wherein

$$\begin{split} R^{21} &= C_2\text{-}C_{20} \text{ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl, =CHR^{23}, -C(O)OR^{23} \\ &-C(O)R^{23}, -CH_2C(O)OR^{23}, -CH_2C(O)NHR^{23}, \text{ where } R^{23} \text{ is H or } C_I\text{-}C_{I0} \text{ alkyl, cycloalkyl, or alkenyl; and} \end{split}$$

 $R^{22} = C_2 - C_{20}$ alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, or alkylaryl.